

**REMARKS****INTRODUCTION:**

In accordance with the foregoing, claims 4 and 5 have been cancelled without prejudice or disclaimer, claims 1, 6, 7, and 16 have been amended, and claims 17-25 have been added. No new matter is being presented, and approval and entry of the foregoing amendments and new claims are respectfully requested. Claims 1-3 and 6-25 are pending and under consideration. Reconsideration is requested.

**RECEIPT OF FOREIGN PRIORITY PAPERS:**

On page 1, box 12, the Examiner does not confirm that the foreign priority documents have been received for the purposes of 35 U.S.C. §119 or recognize the foreign priority claim. As indicated in the Continuing Utility Patent Application Transmittal, the foreign priority documents were filed in the parent application, United States Patent Application No. 10/256,244.

As such, the foreign priority documents do not need to be again submitted in the instant application. MPEP 201.14(b)(II). Therefore, it is respectfully requested that the Examiner acknowledge prior receipt of the foreign priority documents received in the parent application and otherwise recognize the foreign priority claim for the instant application.

**REJECTION UNDER 35 U.S.C. §102:**

In the Office Action at pages 2-4, the Examiner rejects claims 1, 2, 5, and 7-10 under 35 U.S.C. §102 in view of Ichihara (U.S. Patent No. 6,396,792). This rejection is respectfully traversed and reconsideration is requested.

As a point of clarification, claim 5 has been cancelled without prejudice or disclaimer. As such, the rejection of claim 5 is deemed moot.

By way of review, Ichihara discloses a waveform of recording pulses having erasure steps used as erasure signals. However, the first step is a high level Pc1 and a last step is a low level Pc2. (Col. 4, lines 45-62; FIGs. 1B and 1C). There is no suggestion in Ichihara that the erasure steps have other configurations, or that such configurations would be beneficial.

In contrast, claim 1 recites, among other features, that "the generating of the recording waveform comprises causing a power level of a trailing pulse of the erase pulse to be the high level of the multi-pulse and a power level of a leading pulse of the erase pattern to be the low level or the high level." As such, it is respectfully submitted that Ichihara does not suggest the features of claim 1.

For at least similar reasons, it is respectfully submitted that Ichihara does not disclose or

suggest "causing a power level of a leading pulse of the erase pattern to be a same level of the multi-pulse as a power level of a trailing pulse of the multi-pulse" as recited in claim 7.

Claims 2 and 8-10 are deemed patentable due at least to their depending from claim 1.

In the Office Action at pages 4-7, the Examiner rejects claims 1, 4, and 11-16 under 35 U.S.C. §102 in view of Dekker (U.S. Patent No. 2002/0003762). This rejection is respectfully traversed and reconsideration is requested.

As a point of clarification, claim 4 has been cancelled without prejudice or disclaimer. As such, the rejection of claim 4 is deemed moot.

By way of review, consistent with FIGs. 1B and 1C of Ichihara, FIGs. 1A and 1B of Dekker show an erase pulse sequence 14 having a first erase pulse at a high level  $P_e$  and a last erase pulse at a bias level  $P_1$  or  $P_2$  according to the writing speed. (Paragraphs 0028 through 0031; Fig. 2). However, there is no suggestion that the erase pulse sequence 14 has other configurations, or that such configurations would be beneficial.

In contrast, claim 1 recites, among other features, that "the generating of the recording waveform comprises causing a power level of a trailing pulse of the erase pulse to be the high level of the multi-pulse and a power level of a leading pulse of the erase pattern to be the low level or the high level." As such, it is respectfully submitted that Dekker does not suggest the features of claim 1.

On page 6 of the Office Action, the Examiner asserts that FIG. 1A of Dekker shows a cooling pulse. However, while Dekker discloses a low power of a write pulse sequence 13 which extends to the high level pulse  $P_e$  of the erase pulse sequence 14, there is no suggestion that this low power is the same as or above the bias power  $P_b$  or the erase power  $P_e$  of the erase pulse sequence 14. As such, it is respectfully submitted that Dekker does not suggest a "causing a power level of a trailing pulse of the erase pulse to be the high level of the multi-pulse and a power level of a leading pulse of the erase pattern to be the low level or the high level" and "generating a cooling pulse concatenating the recording and erase patterns, in response to the channel modulated digital data, the cooling pulse having a power level below the low level" as recited in claim 16.

Claims 11-15 are deemed patentable due at least to their depending from claim 1.

In the Office Action at pages 7-8, the Examiner rejects claims 1 and 6 under 35 U.S.C. §102 in view of Ohno et al. (U.S. Patent No. 5,150,351). This rejection is respectfully traversed and reconsideration is requested.

By way of review, Ohno et al. suggests a pulse spacing period having narrow signals which alternate between a playback power level  $P_r$  and an erase power level  $P_b$ . (Col. 6, lines

4-51; Figs. 4A through 5(d)). Ohno et al. does not suggest using a power level other than the playback power level  $P_r$  since Ohno et al. suggests using the playback power level  $P_r$  between the write and erase signals to minimize the gradual increase in temperature shown in FIG. 5(b), thereby making the waveform more distinct and reduce jitter. (Col. 6, lines 45-66).

In contrast, claim 1 recites, among other features, "causing a power level of a trailing pulse of the erase pulse to be the high level of the multi-pulse." As such, it is respectfully submitted that Ohno et al. does not disclose and teaches away from the invention recited in claim 1.

Further, while Ohno et al. suggests using the playback power level  $P_r$  and the erase power level  $P_b$ , Ohno et al. does not suggest using a different level in the pulse spacing period. Thus, it is respectfully submitted that Ohno et al. does not disclose or suggest "causing the power level of the leading pulse of the erase pattern to be the low level of the multi-pulse and the power level of a trailing pulse to be the low level of the multi-pulse," where "the low level is greater than a cooling level of the recording and/or erase pattern" as recited in claim 6.

#### **REJECTION UNDER 35 U.S.C. §103:**

In the Office Action at page 8, the Examiner rejects claim 3 under 35 U.S.C. §103 in view of Ichihara and the Examiner's taking Official Notice of an RLL(1,7) method. This rejection is respectfully traversed and reconsideration is requested.

Since the Examiner's taking Official Notice does not cure the above noted deficiency of Ichihara as applied to claim 1, from which claim 3 depends, it is respectfully submitted that the combination does not disclose or suggest the features of claim 3 due at least to the combination not disclosing the features of claim 1.

Moreover, even assuming *arguendo* that the Examiner is correct in regards to the existence of an RLL(1,7) method, there needs to be evidence of record as to a motivation to use the RLL(1,7) method in place of the RLL(2,10) method of Ichihara. While the Examiner argues that the methods are equivalent, such an argument merely indicates that one skilled in the art could make the combination without specifying the desirability of making the combination.

In general, an unsubstantiated statement that existing elements could be combined as it was in the skill of the art to do so does not provide a basis for a rejection under 35 U.S.C. 103(a). In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988). Similarly, an unsubstantiated statement that elements could be combined as being "common sense" does not provide a basis for a rejection under 35 U.S.C. §103(a) since such unsupported statements prevent meaningful review under the Administrative Procedures Act, 5 U.S.C. §706. In re Zurko, 59 USPQ2d 1693

(Fed. Cir. 2001). Therefore, in order to establish a prima facie case for obviousness, the rejection must detail the existence of the individual elements at the time of invention, that there was an existing motivation to combine these elements contained in the then existing art, and that this motivation is beyond an unsupported statement that the combination of these elements was within the skill of the art. In essence, there needs to be proof that such a motivation exists, not conjecture. This rigorous proof is required in order to prevent the trap of impermissible hindsight. Since the Examiner has not provided evidence of a motivation to substitute the methods in order to meet the invention, it is respectfully submitted that there is insufficient evidence of record to maintain a prima facie obviousness rejection of the claim under 35 U.S.C. §103.

**PATENTABILITY OF NEW CLAIMS:**

Claims 17-25 are deemed patentable due at least to their depending from claim 1.

**CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, it is respectfully submitted that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any additional fees associated with the filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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